

Status Of The Claims:

1. (Previously Presented) A medical device comprising a multilayer region that comprises:
 - (a) a charged nanoparticle layer comprising charged nanoparticles;
 - (b) a plurality of charged polyelectrolyte layers comprising charged polyelectrolyte species, and
 - (c) at least one charged therapeutic agent,wherein said medical device is configured for implantation or insertion into a subject.
2. (Original) The medical device of claim 1, wherein said medical device is selected from a balloon catheter, a graft, a stent and a filter.
3. (Original) The medical device of claim 1, wherein said multilayer region comprises a plurality of charged nanoparticle layers.
4. (Original) The medical device of claim 1, said multilayer region comprises a plurality of charged nanoparticle layers that comprise nanoparticles selected from carbon nanoparticles, silicate nanoparticles, and ceramic nanoparticles.
5. (Original) The medical device of claim 1, wherein said multilayer region comprises a plurality of charged nanoparticle layers that comprise nanoparticles selected from carbon nanotubes, carbon nanofibers, fullerenes, ceramic nanotubes, ceramic nanofibers, phyllosilicates, monomeric silicates and dendrimers.
6. (Original) The medical device of claim 1, wherein said multilayer region comprises a plurality of charged nanoparticle layers that comprise single walled carbon nanotubes.
7. (Original) The medical device of claim 1, wherein said multilayer region comprises a plurality of charged nanoparticle layers that comprise nanoparticles ranging from 0.5 to 100 nm in smallest dimension.

8. (Previously Presented) The medical device of claim 1, wherein said multilayer region comprises a plurality of charged polyelectrolyte layers that comprise a polycation selected from polyallylamine, polyethyleneimine, poly(dimethyl diallyl ammonium chloride), protamine sulfate, chitosan, gelatin, spermidine, and albumin, and a plurality of charged polyelectrolyte layers that comprise a polyanion selected from poly(styrene sulfonic acid), poly(aniline sulfonic acid), polyacrylic acid, sodium alginate, polystyrene sulfonate, eudragit, gelatin, hyaluronic acid, carrageenan, chondroitin sulfate, carboxymethylcellulose.
9. (Original) The medical device of claim 1, wherein said multilayer region comprises from 10 to 200 charged polyelectrolyte and nanoparticle layers.
10. (Canceled)
11. (Original) The medical device of claim 1, wherein a protective polymer coating layer is provided over at least a portion of said multilayer region.
12. (Original) The medical device of claim 1, wherein said plurality of charged polyelectrolyte layers comprises a biodegradable charged polyelectrolyte layer.
13. (Previously Presented) The medical device of claim 12, wherein said charged therapeutic agent is provided beneath or within said biodegradable polyelectrolyte layer.
14. (Original) The medical device of claim 1, wherein said medical device comprises a plurality of said multilayer regions.
15. (Original) The medical device of claim 1, wherein at least a portion of said multilayer region is freestanding.
16. (Original) The medical device of claim 1, wherein at least a portion of said multilayer region is disposed on an underlying or overlying structure.
17. (Original) The medical device of claim 16, wherein said underlying or overlying structure is a

temporary structure that is not implanted or inserted with said medical device.

18. (Original) The medical device of claim 16, wherein said underlying or overlying structure is a permanent structure that forms part of said medical device.

19. (Original) The medical device of claim 16, wherein said underlying structure is a balloon.

20. (Original) The medical device of claim 16, wherein said underlying structure is a catheter.

21. (Original) The medical device of claim 16, wherein said underlying structure is a stent.

22. (Original) The medical device of claim 16, wherein said underlying structure is a graft.

23. (Original) The medical device of claim 16, wherein a patterned multilayer region is provided over said underlying structure.

24. (Original) The medical device of claim 16, wherein said underlying structure is a ceramic,

25. (Previously Presented) A medical device comprising a multilayer region, the multilayer region comprising:

a) a charged nanoparticle layer comprising charged nanoparticles; and

(b) a plurality of charged polyelectrolyte layers comprising charged polyelectrolyte species,

wherein one or more reinforcement members are provided adjacent to or within said multilayer region, said device is configured for implantation or insertion into a subject.

26. (Previously Presented) The medical device of claim 25, wherein said one or more reinforcement members are in the form of a fiber mesh, a fiber braid or a fiber winding.

27. (Previously Presented) A medical device comprising a multilayer region, the multilayer region comprising:

a) a charged nanoparticle layer comprising charged nanoparticles; and

(b) a plurality of charged polyelectrolyte layers comprising charged polyelectrolyte

species, the medical device further' comprising a residue from a removable substrate adjacent said multilayer region.

28. (Previously Presented) A medical device comprising a multilayer region, the multilayer region comprising:

a) a charged nanoparticle layer comprising charged nanoparticles; and

(b) a plurality of charged polyelectrolyte layers comprising charged polyelectrolyte

species,

wherein charged nanocapsules, which comprise a plurality of charged polyelectrolyte encapsulation layers, are incorporated into said multilayer region.

29. (Original) The medical device of claim 28, wherein said charged nanocapsules comprise a therapeutic agent.

30. (Previously Presented) The medical device of claim 1, wherein said therapeutic agent is selected from anti-thrombotic agents, anti-proliferative agents, anti-inflammatory agents, anti-migratory agents, agents affecting extracellular matrix production and organization, antineoplastic agents, antimitotic agents, anesthetic agents, anti-coagulants, vascular cell growth promoters, vascular cell growth inhibitors, cholesterol-lowering agents, vasodilating agents, and agents that interfere with endogenous vasoactive mechanisms.

31-52. (Canceled)

53. (Original) The medical device of claim 1, wherein said medical device comprises a balloon that is configured for insertion into and inflation within a body lumen of a subject, said balloon comprising a multilayer region that further comprises: (a) at least five charged nanoparticle layers comprising charged carbon nanotubes; and (b) at least five charged polyelectrolyte layers comprising charged polyelectrolyte species.

54. (Original) The medical device of claim 53, wherein said charge polyelectrolyte layers are selected from polyacrylic acid, polyethylene imine, or a combination of both.

55. (Original) The medical device of claim 53, further comprising an inflatable balloon underlying said multilayer region.

56. (Original) The medical device of claim 53, further comprising a fibrous reinforcement member.

57. (Previously Presented) A medical device comprising a multilayer region, the multilayer region comprising:

(a) a charged nanoparticle layer comprising charged nanoparticles; and

(b) a plurality of charged polyelectrolyte layers comprising charged polyelectrolyte species,

wherein at least a portion of said multilayer region is free standing, and said medical device is configured for implantation or insertion into a subject.

58. (Previously Presented) A medical device comprising a multilayer region that comprises:

(a) a charged nanoparticle layer comprising charged nanoparticles;

(b) a plurality of charged polyelectrolyte layers comprising charged polyelectrolyte species,

(c) at least one therapeutic agent, and

(d) at least one protective coating is provided over at least a portion of the multilayer region.

wherein said medical device is configured for implantation or insertion into a subject.

59. (Previously Presented) A medical device comprising a multilayer region that comprises:

(a) a charged nanoparticle layer comprising charged nanoparticles;

(b) a plurality of charged polyelectrolyte layers comprising charged polyelectrolyte species, and

(c) one or more reinforcement members provided adjacent to or within said multilayer region, said reinforcement members are in the form of a fiber mesh, a fiber braid or fiber winding, wherein said medical device is configured for implantation or insertion into a subject.

60. (Previously Presented) A medical device comprising a multilayer region that comprises:

(a) a charged nanoparticle layer comprising charged nanoparticles;

(b) a plurality of charged polyelectrolyte layers comprising charged polyelectrolyte species, and

(c) charged nanocapsules incorporated into said multilayer region, said charged nanocapsules comprise a therapeutic agent.

wherein said medical device is configured for implantation or insertion into a subject.